

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: May 1, 1996
Date Received: April 25, 1996
Project: Metro Self Monitor, PO #M53108
Date Samples Extracted: April 30, 1996
Date Extracts Analyzed: May 1, 1996

**RESULTS FROM THE ANALYSIS OF THE PROCESS WATER SAMPLE
FOR CHROMIUM, COPPER, NICKEL, AND ZINC
USING METHOD 6010**

Samples Processed Using Method 3005A
Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M53108	0.59	0.49	0.36	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

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QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 68276 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.59	0.60	2	0-20
Copper	mg/L (ppm)	0.49	0.50	2	0-20
Nickel	mg/L (ppm)	0.36	0.38	5	0-20
Zinc	mg/L (ppm)	<0.05	<0.05	nm	0-20

Laboratory Code: 68276 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery MS MSD		Acceptance Criteria	Relative Percent Difference
Chromium	mg/L (ppm)	5	0.59	98	98	80-120	0
Copper	mg/L (ppm)	5	0.49	96	99	80-120	3
Nickel	mg/L (ppm)	10	0.36	98	98	80-120	0
Zinc	mg/L (ppm)	5	<0.05	97	99	80-120	2

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery MS MSD		Acceptance Criteria	Relative Percent Difference
Chromium	mg/L (ppm)	5	98	101	80-120	3
Copper	mg/L (ppm)	5	97	100	80-120	3
Nickel	mg/L (ppm)	10	98	102	80-120	4
Zinc	mg/L (ppm)	5	98	101	80-120	3

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

KNJ AI
4.25.96
9:05

Send Report To:

Contact GERALD Thompson

Address 628 Hawthorne ST
City, State, Zip Seattle WA
Phone # (206) 382-8379

Date 4-25-96

PURCHASE ORDER #

7238

METRO Self monitor

m 53108

PROJECT LOCATION

James A. G.

3200 6th Ave S.

REMARKS

SAMPLE DISPOSAL INFORMATION

☐ Dispose after 30 days
☒ Return Samples
☐ Call for Instructions

Sample #

Date/Time
Sampled

Type of Sample

of
Jars

Lab
Sample #

Analyses
Requested

m 53108

4-25 8:70 Am

$$H_2O$$

/

48276

Cr Cu Ni Zn

SIGNATURE

PRINT NAME

COMPANY

Date _____

Time

Requisitioned By:

[Signature]

GERALD Thompson

A.C. 42

4-25-96

8.59

Received by:

Cathy Downing

Cathy Downing

F & B, I

4.25.96

8:58

Relinquished by:

Received by:

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman
James E. Bruya, Ph.D.
(206) 285-8282

3012 16th Avenue West
Seattle, WA 98119-2029
FAX: (206) 283-5044

May 1, 1996

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on April 25, 1996 from your Metro Self Monitor, PO #M53108 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson
Chemist

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Enclosures
ACU0501R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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May 1, 1996

INVOICE # 96ACU0501-1
DUPLICATE COPY

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M53108: Results of testing requested by
Gerry Thompson, Project Manager for material submitted on April 25, 1996.

1 process water sample analyzed for
Chromium, Copper, Nickel, and Zinc
using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due

\$ 65.00